TEXAS DEPARTMENT OF INSURANCE

Engineering Services / MC 103-3A 333 Guadalupe Street P.O. Box 149104 Austin, Texas 78714-9104
Phone No. (512) 322-2212 Fax No. (512) 463-6693

PRODUCT EVALUATION Effective August 1, 2009
WIN-1153 Revised August 1, 2011

*The following product has been evaluated for compliance with the wind loads specified in the **International Residential Code (IRC)** and the **International Building Code (IBC)**. This product shall be subject to reevaluation **December 2013**.*

This product evaluation is not an endorsement of this product or a recommendation that this product be used. The Texas Department of Insurance has not authorized the use of any information contained in the product evaluation for advertising, or other commercial or promotional purpose.

This product evaluation is intended for use by those individuals who are following the design wind load criteria in Chapter 3 of the IRC and Section 1609 of the IBC. The design loads determined for the building or structure shall not exceed the design load rating specified for the products shown in the limitations section of this product evaluation. This product evaluation does not relieve a Texas licensed engineer of his responsibilities as outlined in the Texas Insurance Code, the Texas Administrative Code, and the Texas Engineering Practice Act.

Builders Vinyl Tilt Single Hung Windows, Non-impact Resistant, manufactured by:

JELD-WEN Windows & Doors
3737 Lakeport Blvd.
Klamath Falls, Oregon 97601
(541) 882-3451

will be acceptable in designated catastrophe areas along the Texas Gulf Coast when installed in accordance with the manufacturer's installation instructions and this product evaluation.

PRODUCT DESCRIPTION

The Builders Vinyl windows are vinyl tilt single hung windows. The vinyl tilt single hung windows evaluated in this report are individual, non-impact resistant windows. This product evaluation report is for vinyl tilt single hung windows based on the following tested construction:

General Description:

System	Description	Label Rating
1	Builders Vinyl Tilt Single Hung Window; (O/X)	H-R50 48 x 77

Product Dimensions:

System	Overall Size	Operable Sash Size	Fixed Daylight Opening Size
1	47 ½" x 76 ½"	45 ⅝" x 38 1/16"	44 13/16" x 36"

Glazing Description:

System	Glass Construction [1]	Glazing Method [2]
1	IG-1	GM-1

Note: [1] See the "Glass Construction Key" for the glazing construction.
[2] See the "Glazing Method Description Key" for the glazing method description.

Glass Construction Key:

IG-1: The window contains a sealed insulating glass unit. The sealed insulating glass unit is comprised of two sheets of single strength ($\frac{3}{32}$") annealed glass separated by a U-shaped spacer system. The glass thickness and type used in the insulating glass unit of the tested assembly and in smaller assemblies shall comply with ASTM E 1300-04.

Glazing Method Description Key:

GM-1: The insulated glass units are exterior glazed. Both are glazed using a silicone sealant and a vinyl snap-in glazing bead.

Frame Construction: The frame members are constructed of polyvinyl chloride (PVC). The frame corners are mitered and welded. The corners are secured using two (2) No. 8 screws at each end. The fixed meeting rail is end milled and double screw-connected at each end through the frame and into screw ports in the fixed meeting rail.

Sash Construction: The sash members are manufactured from extruded vinyl (PVC). The sash corners are mitered and thermally welded construction.

Sill Extender: A full length sill extender is snap-fit into the frame sill channel and sealed with silicone sealant.

Reinforcement: The fixed meeting rail, the sash meeting rail, the sash bottom rail, and each sash stile contain custom-shaped galvanized steel reinforcement. The reinforcement shall be of sufficient length to support each member.

Hardware:

- Metal cam lock with keepers; Two (2) required; Located on the lock rail.
- Block and tackle balance with locking tilt shoes; Two (2) required; Located in each side jamb.
- Metal pivot bar; Two (2) required; Located on the bottom rail, one at each end.
- Tilt latch; Two (2) required; Located on the lock rail, one at each end.

Product Identification: A certification program label (AAMA) will be affixed to the window. The certification program label includes the manufacturer's code name (**JW-18**); product name: **Builders Vinyl Tilt SH**; performance characteristics; the approved inspection agency (AAMA); and the applicable standards: AAMA/WDMA/CSA 101/I.S.2/A440-05.

LIMITATIONS

Design pressures (DP):

System	Maximum Width (in.)	Maximum Height (in.)	Design Pressure (psf)
1	47 $\frac{1}{2}$	76 $\frac{1}{2}$	$\pm$ 50

Impact Resistance: These window assemblies do not satisfy the Texas Department of Insurance's criteria for protection from windborne debris. These window assemblies will need to be protected with an impact protective system when installed in areas where windborne debris protection is required.

Acceptance of Smaller Assemblies: Windows assemblies with dimensions equal to or smaller than those specified above are acceptable within the limitations specified in this report.

INSTALLATION INSTRUCTIONS

General: The window assembly shall be prepared and installed in accordance with the manufacturers recommended installation instructions. Detailed installation instructions and drawings are available from the manufacturer.

Installation:

Nail Fin Installation: The wall framing shall be minimum Southern Yellow Pine dimension lumber. The window shall be fastened to wall framing using the nailing fin of the window with minimum No. 8 wood screws. The fasteners shall be spaced approximately 4 inches from each corner and approximately 4 inches on center along the perimeter of the window. The fasteners shall be long enough to penetrate a minimum of 1 ½ inches into the wall framing members.

Frame Installation: The wall framing shall be one of the following:

- Southern Yellow Pine dimension lumber
- Concrete (cast-in-place or precast, minimum 2,700 psi)
- Concrete block (grout filled, ASTM C-90, grade N, Type 1
- Steel (minimum 12 gauge)

The window shall be fastened to the wall framing using the frame of the window. Fasteners shall be spaced approximately 4 inches from each corner and approximately 4 inches on center along the perimeter of the window frame. For wood wall framing, the fasteners shall be minimum No. 10 screws. The fasteners shall be long enough to penetrate a minimum of 1 ½ inches into the wall framing members. For concrete or concrete block wall framing, the fasteners shall be minimum 3⁄16 inch diameter Tapcons. The fasteners shall be long enough to penetrate a minimum of 1 ¼ inches into the wall framing members. For steel wall framing, the fasteners shall be minimum No. 10 Tek screws. The fasteners shall be long enough to penetrate a minimum of three threads through the steel framing.

Note: The manufacturer's installation instructions shall be available on the job site during installation. All fasteners shall be corrosion resistant as specified in the International Residential Code (IRC), the International Building Code (IBC), and the Texas Revisions.